

## Yoga to Reduce Hyperkyphosis (as well as Swayback and Hyperlordosis)

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### Principles of Better Movement

To make your practice more beneficial, follow these principles:

“Make your practice smarter than your habits.” —T.K.V. Desikachar

“Move from the core, move from the breath; not from the periphery.”

“Savor each breath. (If you aren’t, then you are either on autopilot or working too hard, or both, and neither is helpful.)”

“Slouching is not the problem. Having no other option but to slouch, that’s the problem.”

“Create more space wherever there is a lack, through relaxing muscles you are over-contracting, and engaging muscles you are typically ignoring.”

“Movement is not the result of muscle contraction. Movement is the result of some muscles contracting, and others relaxing.”

“Relaxation is not something you can do. To relax, you have to UNDO something. To relax, you have to learn how to get your brain to stop contracting muscles.”

“Make every movement, every breath, every pose, and every pause, deliberate and delicious.”

Keep asking yourself: “Are you using your body to get into the poses, or are you using the poses to get into your body?” —unknown, transmitted by Bernie Clark

“Move towards balance and away from extremes, because wellbeing is a place of balance.”

“Too much is not better than the right amount. Neither is too little.” (The Goldilocks Principle)

“If you are not enjoying your practice, modify your practice or your attitude or both. Cultivating joy is an integral part of wellbeing.”

“Instead of focusing on perfection, ask yourself what you can do right now to make this moment a little bit better.”

“You can’t hate yourself happy. ...Real change begins with self-love and self-care.”  
—Jessica Ortner

“The activity you’re most avoiding contains your biggest opportunity.”  
— Robin S. Sharma

## How to Practice

### Step 1: Build a New Habit

The first and most important task for you to improve your posture is to establish a daily habit of doing *something* positive for your posture. Practice each day. For the first few weeks, keep your practice short and simple and focus on enjoying it. Trying to do too much too soon is a common trap people fall into when trying to develop a new habit. This is not about willpower. It's about developing a new routine. Don't believe me? How much willpower does it take each day for you to brush your teeth?

Allow yourself to take a day off as often as you want, but never two days in a row. As long as you stick to this rule, you will not lose your new habit.

### Step 2: Be Gentle, Be Mindful, Be Curious; Don't Try to Force Better Posture

I am going to take the time to explain the science behind this statement, as it is exceedingly important for your progress. **You can't force better posture. It. Will. Not. Work.** Here are the three main phenomena that explain why:

#### *The Science, Part A: The Reciprocal Inhibition Reflex*

Poor posture is the result of muscular imbalances. Some of muscles that we need in order to maintain good posture have gotten weak over time. Why did they get weak? It's not because you are lazy. It is not your fault.

The first part of the explanation is a reflex called reciprocal inhibition. A reflex is something that is by definition outside of your brain's ability to control. Here is how the reciprocal inhibition reflex works. Muscles come in pairs: One muscle flexes a joint, another muscle extends the joint. These paired muscles are called antagonists, because they do the opposite work of each other. Whenever you engage a muscle, the reciprocal inhibition reflex is triggered, and it causes an inhibition (a relaxation) in the antagonist. (When you contract your biceps to flex your elbow, your triceps relaxes automatically, and vice-versa. That's why the reflex is called reciprocal). The evolutionary advantage of having this reflex is that it allows for more efficient movement that requires less muscle power and less brain power. It's a beautiful thing. Until it is not.

The problem arises when you start using a particular muscle or muscle group habitually. If you are constantly engaging one muscle group, you are constantly inhibiting its antagonists. The muscles you use all the time get stronger and stronger, and the synapses that need to fire for them to contract get ever thicker and thus require less and less mental effort to contract. The muscles that are inhibited get weaker and weaker, and the synapses that need to fire get ever thinner, requiring ever more mental effort to contract. Enter the second phenomenon:

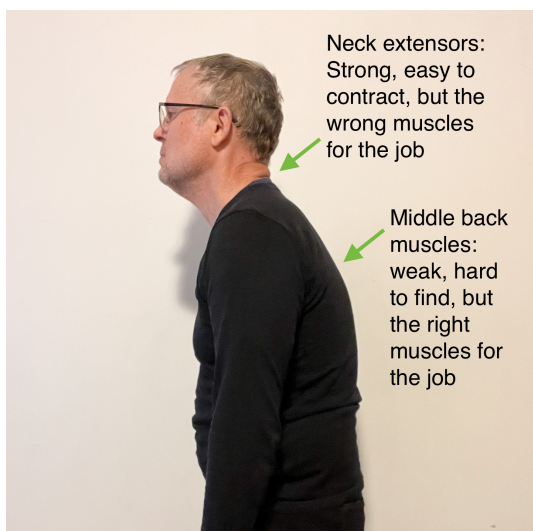
#### *The Science, Part B: The Neuroeconomics of Movement*

Which muscles we use to accomplish our movement goals is normally guided by largely subconscious processes in a part of the brain called the motor cortex. The motor cortex decides which muscles to contract based on the strength of the available muscles, and even more importantly, based on the mental effort required to contract those muscles. This pattern is called the **exploitation mode**, and it heavily favors strong muscles that

can be contracted with little mental effort. As your brain repeatedly chooses to contract strong muscles that require little mental effort, this pattern becomes a self-reinforcing vicious cycle.

There is, however, another mode that your motor cortex can operate in: The **exploration mode**. In exploration mode, there is more conscious control over which muscles to contract to create a desired movement pattern. However, when your movements are very goal oriented, or when you are trying to force a movement, you default to exploitation mode. When you are forcing a movement, you are condemned to using the muscles that you use all the time. However, those muscles cannot take you out of poor posture. They helped cause the poor posture in the first place, and they will only make it worse. **You can't force better posture**. You have to develop new movement patterns, and that can only happen if you are gentle, curious, and mindful.

In the context of a slouching posture, which muscles are we talking about?



The muscles you are tempted to engage to fix your posture, but which are already over-contracted, are the muscles in the back of your neck. You actually want to learn how to relax these muscles. The muscles that you want to engage to improve your posture are your middle back muscles. However, they are weak and hard to access, and when you are in exploitation mode, your brain will ignore them.

### *The Science, Part C: Connective Tissue Remodeling*

There is one more important piece to the posture puzzle that is often ignored. All tissues in the body are constantly remodeling themselves. Complete connective tissue turnover can take from a few months to 1-3 years, depending on the tissue. As connective tissue remodels itself, it responds to the stresses put upon it. If it is consistently stretched over a number of months, it will grow longer. If it does not experience tensile (stretching) forces, it will simply grow shorter. Again, the reason for this is efficiency. Making tissue is expensive. Why make more than you need? If you have been slouching for a few decades, the connective tissue in the front of your chest (and along the front of your spine) has not been experiencing sufficient tensile forces, and will have gotten shorter and shorter over time. Thus the very first thing we need to do is to stretch out the front of the chest. If we don't do this, the amount of effort that the weak middle back muscles need to generate to take us out of our slouching posture is just too much, causing us to default to exploitation mode (Must. Try. Harder.) which then causes us to use the wrong muscles, namely the neck extensors.

## Modify Your Seated Posture and Your Computer Setup

Do this *every time* you sit down.



When we sit down, our natural tendency is to let the hips rotate posteriorly. We do this to minimize the hip flexion in order to avoid any chance of having to stretch the back of the hips and thighs (1<sup>st</sup> photo shows incorrect action; 2<sup>nd</sup> photo shows correct action).

We are pre-programmed to figure out how to accomplish our movement goals with the least amount of perceived effort, and that means never engaging what is weak, and never stretching what is tight. This dubious movement strategy is the main cause of poor posture (and also lower back pain), because it tempts us into flexing too much in our lower back and not enough in our hip joints. If you have osteoporosis, it also dramatically increases your chances of fracturing a vertebra.

One way to avoid the problem of a rounded back while sitting is to use a lumbar cushion that maintains your lumbar arch for you. However, this only works if you have an appropriate lumbar support with you.

Here is a technique that always works and doesn't require a prop. It requires you to place your hips with intention, **because it is your hip placement that determines the shape of your back when you are sitting.**

The way to avoid sitting with an excessively rounded back (a hunched posture) is to stick your butt out behind you as you sit down. Another way to say this is that you need to create anterior hip tilt whenever you are sitting down to make sure your back doesn't round excessively when seated.



**A Better Way to Sit Down:** While standing, place your hands on your upper thighs and initiate anterior hip tilt, rotating your tailbone up behind you as you begin to hinge in your hip joints. This will probably feel like you are sticking your butt out behind you. That is the correct feeling to cultivate here. Bend your knees and keep emphasizing hip flexion by continuing to rotate your tailbone up behind you as you slide your hands down your thighs. Bend your knees and hips farther while maintaining the anterior hip tilt until you are fully seated.



If you find yourself sitting with a rounded back, it is not because you are too lazy or too weak. It's because your sit bones ended up too far forward on your chair. The solution to this situation is NOT to desperately grip with your back muscles trying to force your way out of the rounded back. The solution is to re-establish a more neutral hip position by applying anterior hip tilt (=sticking your butt out behind you).

**Adjusting Your Hips While Seated:** By far the most effective way to create a more neutral spine while seated is not rotating the hip crests forwards, **but moving the sit bones back behind you**. If you move the sit bones behind your center of mass, then gravity will maintain your lumbar arch, and sitting can become spacious *and* effortless.

1. Get better at noticing your rounded back when sitting.
2. Unweigh one sit bone and slide your hand underneath you buttock and your sit bone. You should be able to feel the bony protrusion of the sit bone with your middle finger. Engage the muscles that help you stick your butt out and guide your sit bone farther back with the same side hand.
3. Repeat with the other sit bone and your other hand. Repeat this action on both sides until your sit bones are as far back on the chair as possible.
4. Notice the increased arch in your lower back, the increased space in the front of the chest, and the reduced neck tension. Notice also how you can maintain this better posture with virtually no effort, now that you have moved your sit bones farther back.

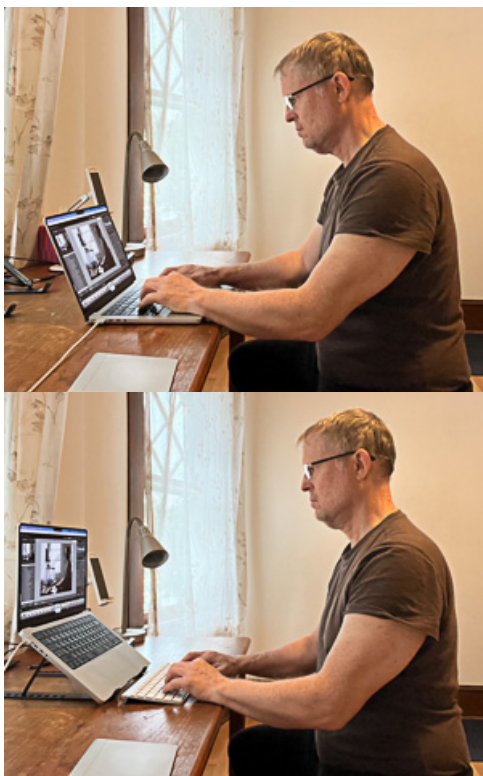
By the way, you can sit better and still rest against the back of the chair. You just need to move your sit bones all the way back on the chair seat (see above). Then, with the sit bones back, simply allow your upper back to move backwards until it contacts the chair back, without letting your sit bones slide forward..



**Sitting Down on a Low Seat:** The lower the seat, the greater the danger of over-rounding your lower back. To safely sit down on a low seat, widen your stance and turn your feet out a comfortable amount (compare the 1<sup>st</sup> and 2<sup>nd</sup> photos). A wider and externally rotated stance allows for more hip flexion with less resistance and thus allows you to keep a neutral spine even if you have to flex your hips farther.

To get back up, bring your feet wide, with the toes pointing out, and bring your feet farther back if possible. Then brace your hands on your knees and lean your upper torso forward while keeping your hips back, and without rounding your back. Inhale with a small “sniff” to pressurize your core, and then press your hands into your knees as you straighten your knee and hip joints. Guide your hips forward as your knees begin to straighten.

### Computer setup for better posture



If you use a laptop for more than a few minutes a day, changing your setup as follows will help you greatly improve your posture. If you have a desktop computer, your monitor is probably still too low, unless it's huge.

Laptops were designed for portability, not ergonomics. They basically force you into poor posture. To remedy that, you need an external keyboard and mouse or track pad, an adjustable laptop stand, and possibly a shoe box. 😊

**Photo 1:** I can't help but slouch here.

**Photo 2:** Using a laptop stand and external keyboard helps somewhat, but is insufficient for most people.



**Photo 3:** The laptop needs to be elevated enough so that you can look at it with a level head. That means that the top edge of the screen needs to be almost level with your eyes. A shoe box plus a laptop stand will probably get you there. If you use progressive eye glasses like I do, you probably want the top edge of your screen slightly lower, as you will have to look through the bottom halves of your glasses to be able to focus. If you find that you have to tilt your head back to look at your screen, lower the screen until you can look at it with your head level! If you find that you have to tilt your head down to look at your screen, raise your screen up a bit higher!



**Photo 4:** Even with perfect screen placement, you can still improve your posture by occasionally remembering to breathe into the front of the chest so that your breast bone floats up and your collarbones broaden. Compare the subtle changes between photos 3 and 4. The only change from 3 to 4 is that I allowed my breast bone to float up. *NOTE: Instructions for how to allow your breast bone to float up are on page 13.*

### Targeted Exercises for Reducing Hyperkyphosis and Forward Head Posture

Any longer-term deviation from neutral posture involves some muscles and connective tissue shortening because they are always slack, and the opposing muscles weakening as they are being overstretched and under-engaged. Yet another set of muscles (i.e., the neck extensors) are permanently over-contracting. This also contributes to the misalignment because the permanent over-contraction of the neck extensors inhibits the contraction of the muscles that could help lift you out of the slouch (the middle back muscles) through a reflex called the reciprocal inhibition reflex.

To improve posture, we need to 1. stretch out what has gotten short and tight, 2. strengthen what has gotten weak, and 3. learn to relax what is constantly contracted. For hyperkyphosis and forward head posture, that means **1. stretching out the front of the chest** (and the front of the thoracic spine), **2. strengthening the middle back**, and **3. relaxing the back of the neck**.



### How to build your exercise routine

Start with two “Stretch out what has gotten tight” exercises (either A, B, C, or D, plus E), doing them daily for a few weeks or months. The first order of business is establishing a daily habit of doing these posture exercises, and it is very helpful to keep your routine simple and easy while you are working on establishing a new daily habit. Once your new habit is well-established and you have fewer than 4 fingers of space between the back of your head and the wall in the Wall Test, add the back strengthening exercises, and finally the neck relaxation exercises.

*NOTE: This gradual approach is especially important if your hyperkyphosis is quite advanced (5 or more fingers of space in the Wall Test). However, the 3 passive chest stretches may be awkward and ineffective with strong hyperkyphosis. If you find this to be true, concentrate on D) “Allowing your breastbone to float up” and one of the back strengtheners on pages 18-19 as well as the better sitting instructions on pages 4-7. Do these for the first couple of months, to make the other exercises more accessible and more effective down the road. You do NOT need to be able to do all the exercises listed in this guide to improve your posture. Doing just two or three will significantly improve your posture if you do them regularly. Adding the other exercises too soon may actually slow you down, as you are more likely to do them correctly once your posture has started improving.*



This is a student of mine. The difference in time between the two photos is four months. The only pose he did was the reclining chest stretch (see below). **But he did it daily for at least 2 minutes.** 😊



2017

2025

(I no longer have neutral posture. I need to start doing the exercises in this guide regularly.)

### Posture Check: Wall Test

*NOTE: Before and after you do any of the following exercises, it may be very helpful to measure your forward head position with this test. Your posture tends to improve immediately with any of the following exercises, and thus the Wall Test provides you with immediate positive reinforcement. And if you consistently don't get any improvement, that is a good sign that you are not doing the exercises effectively. In that case, please email me at*

[gernot@yogamindyogabody.com](mailto:gernot@yogamindyogabody.com) for advice.

Stand 1 inch (2-3 cm) in front of a wall without touching it. If you have a ponytail, take it out. Stand in a way that feels neutral. Shuffle your feet backwards in tiny steps until some body part touches the wall. Note which body part touches the wall first. Note that neutral alignment means that buttocks (actually the sacrum), shoulder blades, and head touch the wall at the same time, with calves and heels *not* touching the wall. This is exceptionally rare but very beneficial.

*NOTE: If you have big glutes, use the corner of a post or corner of a doorway to measure your alignment. Technically you want to measure your head relative to your sacrum, not your buttocks.*

With your buttocks and your shoulder blades touching the wall, measure how far your head is from the wall by noticing how many fingers you can insert horizontally between the wall and the back of your head. Don't tilt the head backwards or force the head to the wall. You want to find out where your head is in daily life relative to your

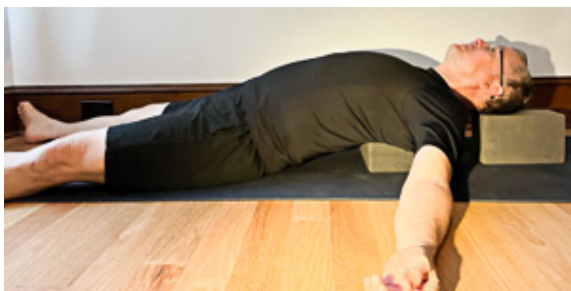
back. **Tilting your head back to “fix” your posture feels awful and can actually worsen your posture!**

*NOTE: For a more accurate measurement, get someone else to measure the gap for you.*

Then do one of the “Chest Stretch” exercises in the “Reducing Hyperkyphosis” section below and then redo the Wall Test. Observe whether your head quite effortlessly gets closer to the wall over time. As long as your head is forward of your upper back, your head position will worsen your hyperkyphosis and your neck tension.

### 1. Stretch out what has gotten tight/short: The front of the chest

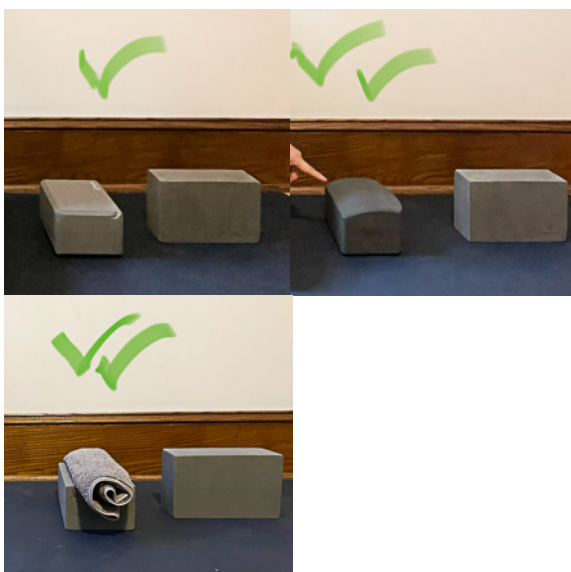
**A) Reclining Chest Stretch:** 2-5 minutes, once or twice a day, or as often as feels beneficial. Use 2 thick (4”, 10 cm) yoga blocks, or a back stretcher and one yoga block.



#### Instructions for two yoga blocks:

*NOTE: I previously recommended a curved Manduka unBLOK to place under the back, but it seems to have been discontinued, A curved surface is more comfortable and more effective. You can place a rolled-up wash cloth or hand towel on a regular block to create a curved surface for your back (4<sup>th</sup> photo). If the towel keeps moving out of place, you can keep it in place with two rubber bands strapped around the block and the towel. The head can be on a regular block. If this seems too fiddly, consider using a back stretcher (instructions below).*

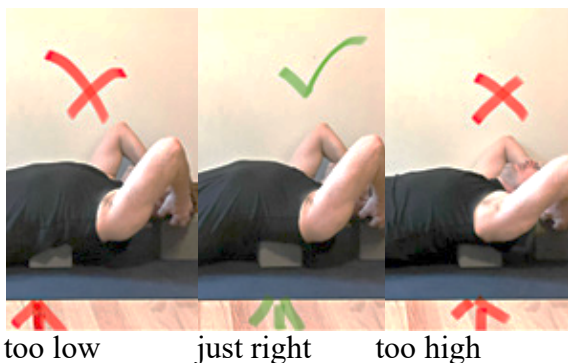
Place one block sideways on its lowest setting under your shoulder blades, optionally with a rolled up hand towel on top (bottom edge of block near the bottom tips of your shoulder blades). Place the other block on the middle setting under your head. Perpendicular to the first, so it’s less likely to fall over. The distance between the blocks is a bit more than a hand-width. If one block is softer than the other, use the softer one under the back.



Adjust the position of the block under your back until you feel the biggest opening in the front of the chest **that you can still fully relax into**. The greatest (but still relaxing) stretch in the front of

the rib cage tends to happen when the lower edge of the block is right under the bottom tips of the shoulder blades, right by your bra strap (if you are wearing one). It is surprisingly easy to put the support either too low or too high on the back. If the block under your back is too close to the head, it may actually allow you to completely avoid the stretch. (Don't underestimate your subconscious brain's ability to avoid stretching what's tight! Your brain is really, really good at that.) Err on the side of placing the block too close to your hips (Too low on your back). You will know it is too low if you can't completely relax into the pose because it is too uncomfortable. Gradually move the block higher, in 1" (2.5cm) increments, until you can completely relax into the pose. Don't move the block any higher than that.

*NOTE: The correct block position will not feel completely comfortable. You should be feeling a significant stretch in the front of your chest. **If you are completely comfortable and are not feeling a stretch, the block is too close to your head and the pose will not be effective!***



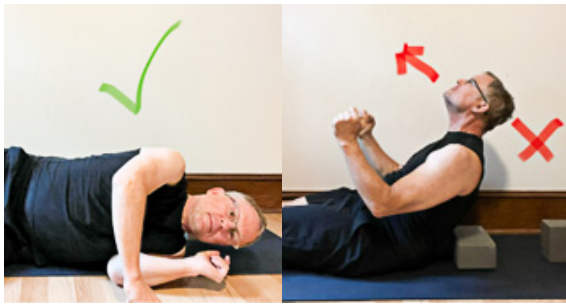
too low

just right

too high

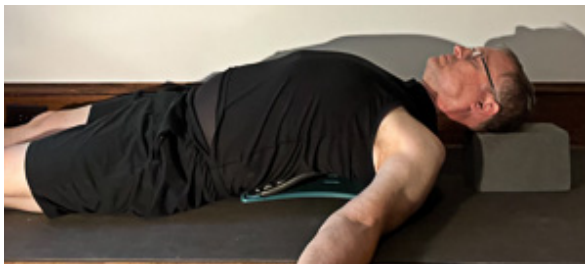
Compare the 3 photos with my hands by my head (so that my arm isn't obscuring the block). Experiment and observe! Don't stress over the block placement too much. ☺ There is a range of at least 2 inches (5 cm) where the block placement is truly effective. However, if the block is too low you will not be able to relax, which reduces the stretch. It will also be less comfortable, which might mean you won't stay there as long, which also reduces the effectiveness. If the block is too high, you may not be getting a stretch in the front of the chest at all. Being able to feel that stretch in the front of your chest is your best guide for placing the block effectively. Learning to notice these stretch sensations in your body will be a huge help in improving your posture.

Straighten your legs along the floor. If you are tempted to bend your knees and plant your feet, notice if you are doing that to subconsciously reduce the chest stretch. If that's the case, then straighten your legs. However, if you need to bend your knees to allow your lower back to be comfortable, then it is okay to bend your knees. Rotate your arms so your palms are facing up, because palms down also reduces the stretch.



Also move your arms away from your sides if you want to increase the stretch more. This is particularly helpful if your shoulder blades tend to roll forward off your back.

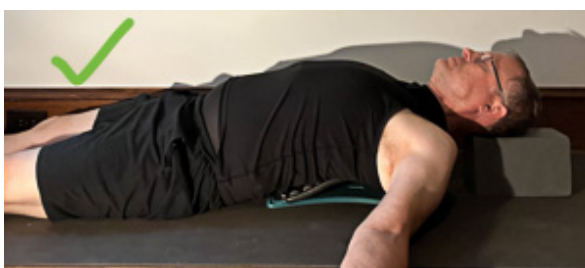
**IMPORTANT:** When you are ready to come out, roll down onto the floor and onto your side, then support your weight with your arms to come up sideways, as shown to the left. Sitting straight up with momentum immediately re-tightens what you just stretched, making the exercise much less effective. It can also cause a vertebral fracture if you have osteoporosis.



### Instructions for a back stretcher and a yoga block:

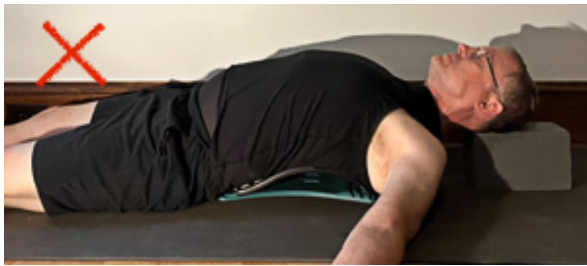
This is now my preferred way of doing this stretch. This is even more true if you are doing this on your bed because you can't do this on the floor, because the bigger surface area of the back stretcher means it will sink less far into your mattress.

*NOTE: Ignore the instructions that came with the back stretcher. Most of those instructions are for reducing pain from herniated disks, not reducing hyperkyphosis, which is what we are using it for.* The back stretcher on its lowest setting goes under your shoulder blades, with the steeper slope pointing towards the head. The yoga block on the middle setting goes under your head. The distance between the two supports is about a hand-width. Adjust the position of the back stretcher under the back until you feel the biggest opening in the front of the chest **that you can still fully relax into**. The greatest stretch in the front of the rib cage tends to happen when the lower half of your shoulder blades are placed on the apex of the back stretcher. If you are wearing a bra, the bra strap should be 1-2" (3-5cm) away from the apex towards the hips. It is surprisingly easy to put the back stretcher either too low or too high on the back. Compare the 3 photos to the left.

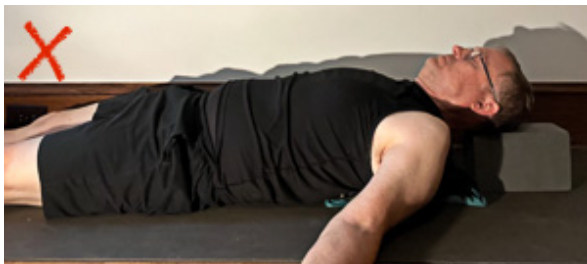


Correct placement.

Experiment and observe! Don't stress over the block placement too much. 😊 There is a range of at least 2 inches (5 cm) where the block placement is truly effective. However, if the support is too low you will not be able to relax, which reduces the stretch. It will also be less comfortable, which might mean you won't stay there as long, which also reduces the effectiveness. If the support is too high, you may



Back support too close to the hips:  
Uncomfortable.



Back support too close to the head:  
Ineffective.



not be getting a stretch in the front of the chest at all. Being able to feel that stretch in the front of your chest is your best guide for placing the block effectively. Learning to notice these stretch sensations in your body will be a huge help in improving your posture.

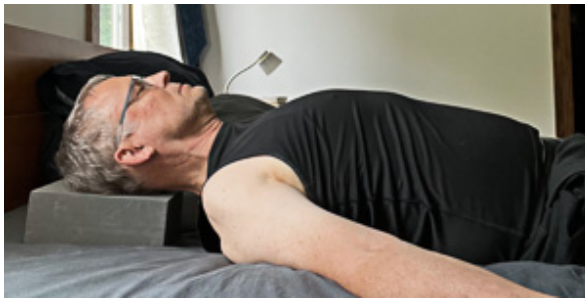
Straighten your legs along the floor. If you are tempted to bend your knees and plant your feet, notice if you are doing that to subconsciously reduce the chest stretch. If that's the case, then straighten your legs. However, if you need to bend your knees to allow your lower back to be comfortable, then it is okay to bend your knees. Rotate your arms so your palms are facing up, because palms down also reduces the stretch. Also move your arms away from your sides if you want to increase the stretch more. This is particularly helpful if your shoulder blades tend to roll forward off your back.

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#### **Instructions for doing the reclining chest stretch on your bed with a back stretcher:**

If you can't get down to the floor and back up safely, this is the most effective way to stretch the front of your chest.

**NOTE:** *If you are doing this stretch on your bed, don't use a block under your torso. Use a back stretcher instead, and perhaps try the middle or highest setting, especially if your mattress is very soft. The weight of your torso will cause the back stretcher to sink down, decreasing the stretch. On a soft mattress, you may also need to reduce the height of the head support, as the support under the head will not sink as deep as the support under the torso, as the head weighs much less. If you feel like you are still not getting a stretch because the back stretcher sinks*



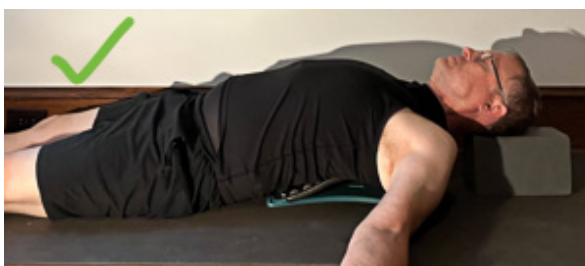
Back stretcher on lowest setting on a mattress: Not much of a stretch.



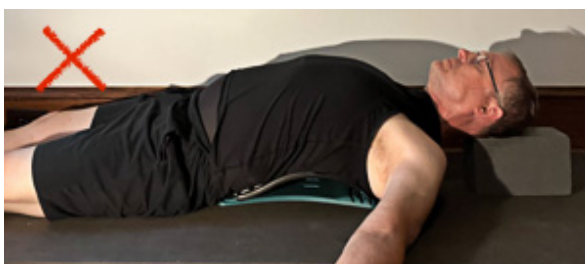
Back stretcher on highest setting on a mattress: Bigger stretch.



Back stretcher on highest setting with a cafeteria tray: Even bigger stretch.



Correct placement.



Back support too close to the hips: Uncomfortable.

*too low, try putting it on a cafeteria tray or a large cutting board (2nd photo). Also compare photos 3-5 to see the changes to the stretch from adjusting the back stretcher.*

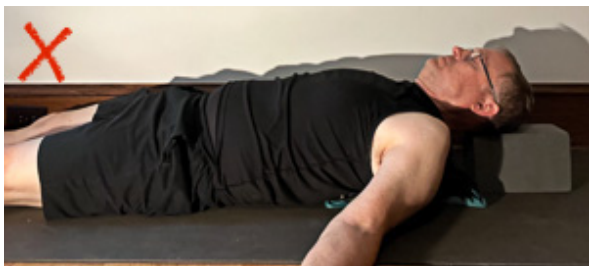
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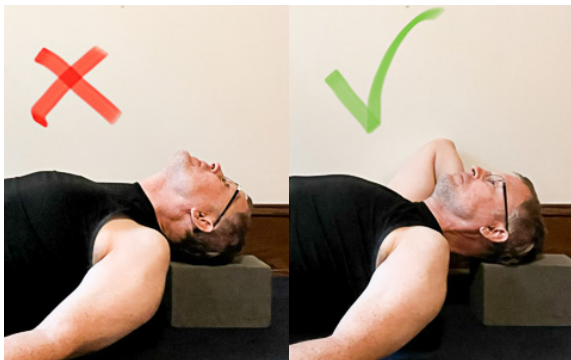
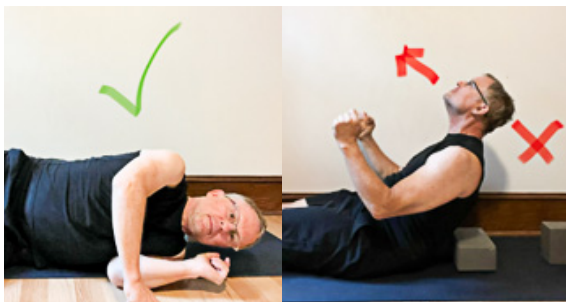
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Back support too close to the head:  
Ineffective.



8 inches high.

9 inches high.



8 inches

9 inches

away from your sides if you want to increase the stretch more. This is particularly helpful if your shoulder blades tend to roll forward off your back.

**IMPORTANT:** When you are ready to come out, roll down onto the floor and onto your side, then support your weight with your arms to come up sideways, as shown to the left. Sitting straight up with momentum immediately re-tightens what you just stretched, making the exercise much less effective. It can also cause a vertebral fracture if you have osteoporosis.

**Instructions for finding the right height for your head support:**

*NOTE: These instructions are the same whether you use a block under your back or a back stretcher.*

Once you have placed your head on the block on its middle setting, lift it again just one millimeter using your hands, and use your finger tips to guide the back of the head a couple of millimeters farther away from your shoulder blades. This will increase the effectiveness and the comfort of the pose, as hyperextending the neck allows you to minimize the chest stretch and doesn't feel good (compare the two photos to the left). When your neck is in its neutral position, there will be a soft space in the back of the neck big enough for three fingers. If there is not enough space for 3 fingers, your neck is still hyperextending. If the back of the neck feels hard and long, you have lengthened the back of the neck too much.

If you feel like your head is still falling back even after lengthening the back of the neck, or your neck feels uncomfortable, consider making the head support higher. As a rule of thumb, if you can fit 4 or more fingers of space between your head and the wall in the "Wall Test" above, then try stacking two blocks on their lowest setting under your head (left photo), or place a folded towel on one block on its middle setting. You can also place the block that supports your head on its highest setting, but with this arrangement it is

easy to knock the block over when you lie down on it. To avoid the block falling over, you can place it against a wall (see right photo). **The key is to make the head support high enough that the head does not feel like it is falling back, but not so high that it is being pushed forward.**



### A Better Way to Get to the Floor:

If you have osteoporosis or osteopenia, you want to avoid rounding your back to help prevent vertebral fractures. Getting down to the floor and back up tempts us into rounding our back. Here are two ways to get to the floor more safely:

*NOTE: If you have osteoporosis/osteopenia, do this every time you get down to the floor and back up from the floor.*

Place a chair against a wall, next to your mat. If you are not next to a wall, place two chair legs on the mat to keep the chair from moving. Place a hand on the back of the chair for stability. If your right hand is on the chair back, step your right foot back and place your left hand on your left thigh for additional stability as you begin bending your knees. Stick your butt out behind you to keep your spine from rounding forward and slide your left hand down your left thigh as you bend your knees farther (1<sup>st</sup> photo). Place the right knee on the mat, bracing yourself with your right hand on the chair back and your left hand on your left knee.

Once you are on one knee, you can place your left hand on the chair seat to bring your other knee to the floor. If your knees are sensitive, you can place a folded blanket where you will place your knees.

Sit on your heels, bring one hand out to the side, slide your hips off your heels and lower yourself onto your side body, again to avoid rounding your spine forward.

*NOTE: If you can't sit on your heels, see the following variation.*

Once your whole side body is on the ground, you can then roll onto your back or your belly, depending on what pose you are doing. To come back up, reverse the steps exactly.



Getting down to the floor and back up without rounding your lower back (*if you can't sit on your heels*):

*NOTE: If you can sit on your heels, do the version described above. It is easier to avoid forward bending if you come down onto your side.*

Place your hand on the wall (or the back of a chair or your thigh) for stability. Bend your back knee and lower it to the mat, bracing yourself with your hand and keeping your whole torso vertical.

Once you are on one knee, bring your other knee to the floor. If your knees are sensitive, you can place a folded blanket where you will place your knees.

Engage your core through a “sniff” (rapid short inhale) and place your hands on your upper thighs. Rotate your tail bone up behind you (anterior hip tilt) as you move your hips back behind you and slide your hands down your thighs through increased flexion in your hip joints, NOT through a rounding of your lower back (compare the 4<sup>th</sup> and 5<sup>th</sup> photos). Bring your hands to the floor and walk them forward with a neutral spine (anterior hip tilt) until your hips, belly and chest come to the floor.

Once your whole body is on the ground, you can then roll onto your side or back, depending on what pose you are doing. When you roll on the floor, start by bracing your core with a “sniff”. To come back up from the floor reverse the steps exactly.

Re-do the Wall Test to observe if your neutral head placement has changed. Stand in a way that feels truly neutral before walking backwards. Measure how many fingers fit between the wall and the back of the head now. Do this from time to time as it is a good measure of your progress in improving your posture. But remember that forcing the head back will not help.

**B) Standing Chest Stretch at a Table or****Counter:** 2 minutes.

*NOTE: You can do this version if getting down to the floor is awkward or impossible for you, but for most people the reclining chest stretch done on a bed will be more effective, and probably more enjoyable (see above).*

**1.** Stand facing a table. Bend your knees slightly and stick your butt out behind you to fold forward from your hip creases and place both hands on the table. (photo 1). Do not round your back to place your hands on the table (photo 2).

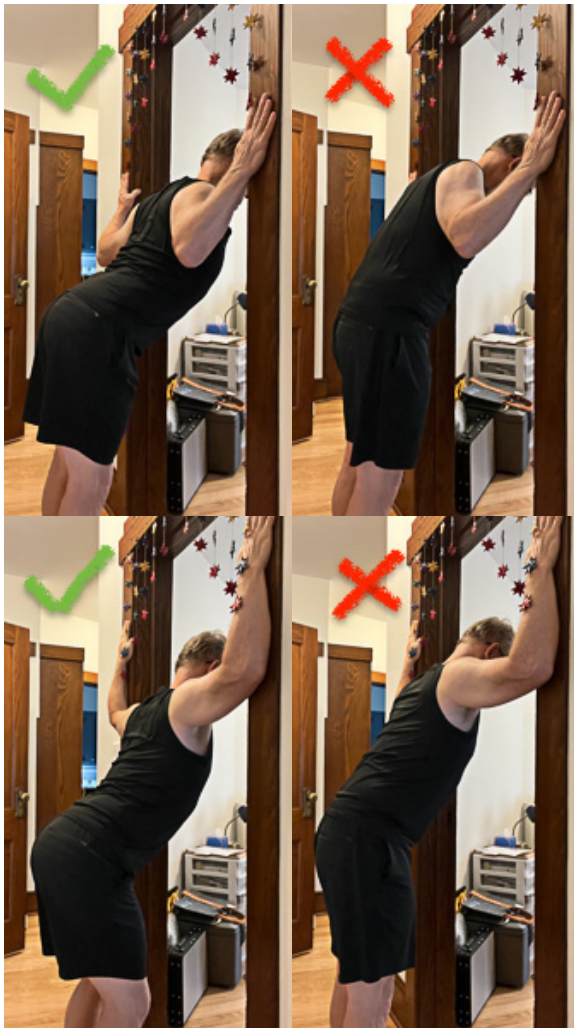
**2.** Fold farther from your hip creases to bring one forearm and then the other to the table, interlacing your fingers (photos 3 & 4).

**3.** Supporting yourself on your forearms, soften between your shoulder blades and let your breastbone sink towards the floor with gravity (photo 5). Keep the back of the neck long and relaxed. You should feel a gentle stretch in the front of the chest. Stay for about 2 minutes, or up to 5 minutes, if you can, for a more effective stretch.

To come out of the pose, reverse the steps.

**C) Standing Chest Stretch in a doorway: 1-3 minutes.**

*NOTE: I think for most people this is the least effective of the 3 chest stretches, but it is a good alternative when you don't have blocks or a table, or if the other two chest stretches are not possible for you. The main reason that I think this stretch is less effective is that it is primarily a front of the shoulder stretch, not a spinal stretch. In order to make it effective, you need to follow the instructions closely and active backbend your*



upper torso. For most people the reclining chest stretch done on a bed will be more effective, and probably more enjoyable (see above).

**NOTE: If you have an old shoulder injury, this exercise may aggravate it! Proceed with caution.**

1. Stand facing a doorway, with your feet far enough from the doorway that you have to lean forward to place your hands on the frame. Hinge from your hips to place your hands on the doorframe at about shoulder height. Alternatively, if you have the range of motion and the door is narrow enough, place your elbows on the doorframe at about shoulder height, with your hands higher up on the frame (3<sup>rd</sup> photo). Either version works. Do the one that feels more comfortable for your shoulders.

2. Bend your knees and stick your butt out behind you to tilt the tops of your hips forward to increase the backbend all along your spine. Don't lift your chin to try to backbend. It will backbend your neck, but not the rest of your spine. You have to stick your butt out (anterior hip tilt) to create the backbend. 1<sup>st</sup> and 3<sup>rd</sup> photos show correct action, 2<sup>nd</sup> and 4<sup>th</sup> photos show incorrect action. If you round your back here, this stretch will NOT be effective.

3. Gradually relax and soften between the shoulder blades to allow gravity to take your breastbone farther forward, closer to the doorway. If you find the stretch to be too intense, you can step one foot forward and put enough weight into the front foot to make the stretch reasonable (neither too strong nor too weak). You should feel a decent stretch in the front of the chest, not just the front of the shoulders. Stay for about 1 minute, or up to 3 minutes, if you can, for a more effective stretch.

To come out of the pose, step one foot forward and press down through the front foot to support your weight as you come back up.



**D) Chest Stretch with a Strap:** 1-2 times a day, 5-10 repetitions.

Sit on the front half of a chair, without leaning against the backrest. If you do this standing, the temptation to push your hips forward to minimize the stretch is just too great. Start with arms down and in front and make the strap quite

long. Inhale the strap overhead while keeping your shoulder blades connected down your back, away from your ears. Exhale the arms back down in front, or, for a deeper stretch, exhale the arms down behind your back. Don't force the movement. Stop before the stretch gets too intense, or lengthen the strap more to keep the intensity on the edge of reasonable. Make sure you don't bend your elbows, as that allows you to avoid the stretch. Learn to smile through the tight spot to disrupt the stress response, and keep the back of the neck relaxed.



Re-do the Wall Test to observe if your neutral head placement has changed. Stand in a way that feels truly neutral before walking backwards. Measure how many fingers fit between the wall and the back of the head now. Do this from time to time as it is a good measure of your progress in improving your posture. But remember that forcing the head back will not help.



### **E) Allowing Your Breastbone to Float Up:**

Practice as often as you remember, multiple times per day, for 10-120 seconds each. Try it first while standing with your middle back touching a wall, but you can also do this without a wall, sitting or standing. Place one hand on your belly button and one hand on your breastbone to notice the movement more easily.

*NOTE: You can also measure the distance between your head and the wall before and after this exercise to monitor your progress.*

As you inhale, notice where the movement is happening. If your belly is expanding on your inhaled, gently engage your lower belly muscles up and in on your next exhale, and then maintain some belly muscle engagement for the duration of this exercise. As you take your next inhale, notice that your breast bone is now lifting up and away from your belly button. Placing your hands on your body really helps your brain notice these movements.

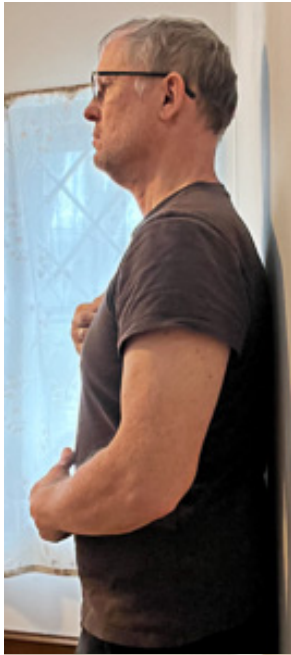
Allow your breast bone to float up as a side effect of the expansion of your lungs (2<sup>nd</sup> photo). As your breast bone floats up, also feel the tops of your shoulders moving backwards, your shoulder blades sliding down your back (and down the wall), and your bottom side ribs floating forward.

Please don't try to pull up on your breastbone with your neck or throat muscles or by lifting your shoulders. That is completely counterproductive! The first few times you do this you may want to practice while facing a mirror to ensure that you are not just using muscles you are already over-contracting.

As you exhale, let the breast bone settle back down (3<sup>rd</sup> photo), but not quite as far as where it started.

With each inhale, let the breastbone float up an extra millimeter or two, and with each exhale, let it settle one or two millimeters less. Prioritize a slow, deep, enjoyable breath as you do this exercise.

If you do this regularly, you may find that your head will eventually float quite effortlessly to the wall (4<sup>th</sup> photo), but any spacious-feeling movement in this direction is a clear win! You don't have to be able to get your head to the wall for this to work. And in fact, if you are simply tilting your head to the wall because you want to see results, you will strengthen the wrong muscles and you may actually make your slouch worse. Your head needs to stay very close to level throughout.



*NOTE: I intentionally instruct this using passive voice (“let the breastbone float up”). We are trying to learn how to use muscles we are not good at engaging. If you are forcing the movement, you will likely use the wrong muscles, the ones you are already too good at engaging.*

Do this as often as you like, eventually without putting your hands on your torso. You can do this pretty much anywhere: standing in line, sitting in your car, or sitting in a boring meeting. By breathing into the tight spot, in this case, the breastbone, you stretch out what is tight. However, the breast bone won't lift unless you also gently engage the middle back muscles. One of the results of engaging the middle back is that the back of the neck relaxes as well. Thus this exercise addresses all 3 pieces of the solution: 1. Stretch what is tight, 2. Strengthen what is weak, and 3. Relax what is over-contracted.

## 2. Strengthen what has gotten weak: The middle back

*NOTE: Before you can effectively engage muscles you have been ignoring, your brain has to re-learn how to contract them (because of the reciprocal inhibition reflex). The first two exercises are more about training your brain, while the third one builds more strength.*



### **A) Finding your middle back muscles:**

(preparation for the next two exercises)

*NOTE: This exercise works great for some people, and not at all for others, as it requires significant shoulder range of motion. If you can't lift your elbows above your shoulders while keeping your neck relaxed, then just skip this exercise.*

With your back and butt touching a wall, lift your elbows just above shoulder height, with your fingers pointing forward and your elbows touching the wall. (You can also do this in the middle of the room.) If you tensed the back of your neck to lift your elbows, relax the back of the neck and release your shoulder blades down your back. Inhale rotate your fingertips towards the ceiling by engaging your middle back muscles. Feel the engagement near the bottom tips of the shoulder blades connecting the shoulder blades onto the back. These are the muscles we want to engage for the next two exercises.

*NOTE: When done correctly, your lower back ribs will come away from the wall, while the upper shoulder blades stay in contact with the wall.*

**B) Hands interlaced behind your back:**

Standing or sitting, interlace your hands behind your back.

1. Inhale allow your elbows to move towards each other, and both elbows and shoulder blades to move down behind your back as you lift your breast bone, but keep your elbows slightly bent. Maintain pose for a few breaths, rest, and repeat 3-5 times.

2. If you are able, on an exhale move your hands forward past your waist while moving your elbows towards each other *and down the back*. Hold pose for one breath cycle, repeat on the other side, 3-5 times.

Having the elbows touch behind the back is not the point. But the desire to do so is not problematic here because it encourages a backbend in the middle-upper back. There should be no neck tension here. If there is, return your hands to center, and lift your breast bone while rolling the shoulder blades down your back before moving the hands forward again.

*NOTE: If you can't move your hands to the side of your waist, simply keep them centered behind your back and focus on moving your elbows lower through a lifting of the breastbone and a corresponding lowering of the shoulder blades.*

Do not focus on moving your hands lower. If you do, you will likely just straighten your elbows which is counterproductive.



**C) Mini Bridge at the wall:** once a day, 20-30 repetitions, each repetition lasting for one long, delicious inhale, about 3-8 seconds. On each exhale, relax back to the starting position. Once the movement feels intuitive, you can switch to doing 2-3 repetitions, but holding each rep for 30-40 seconds.

Stand with your buttocks and back touching a wall. Bend your elbows and place them against the wall next to your ribcage. On your exhale, tone your lower belly. On your next inhale, keep the lower belly engaged and direct the breath into your upper chest as you press your elbows into the wall to rotate your ribcage as follows:

1. Breast bone floats up and away from the belly button.
2. Tops of the shoulders roll towards the wall.
3. Shoulder blades move down the back.
4. Lower back ribs move forward away from the wall.

Lead with your breast bone, not your chin, allowing the breast bone to float up. See 5<sup>th</sup> photo for incorrect action.

You can repeat this action with your elbows farther out to the sides, so your upper arms are at a 45 degree angle to your torso. You don't need to lift your arms as high as I have them in the 3<sup>rd</sup> and 4<sup>th</sup> photos. I have my elbows that high so you can see the shape change in my middle back.

*NOTE: If you find this action difficult, focus on the correct action, even if the movement feels incredibly small. The first step is to find the right muscles and strengthen the correct synaptic connections. Once the movement feels more natural, you can focus on creating a bigger movement. If you insist on a big movement from the start, you probably will never learn to use the muscles you need to use to make this effective.*

### 3. Relax what is always contracted: The back of the neck

*NOTE: There are two ways to do this, standing or reclining. If your hyperkyphosis is advanced, (5 fingers of space or more between the back of your head and the wall), do only the reclining version, and place one or more thick books under your head and slide your head along this elevated surface. Make sure the book on top has a smooth cover that allows your head to slide with ease.*

*If your hyperkyphosis is milder (fewer than 4-5 fingers of space) try both variations as they are quite different. The standing one allows you to engage the middle back muscles along with the deep neck flexors, but the reclining one allows you to really emphasize the relaxation component. Start with the reclining one to cultivate a sense of ease, of relaxing into the movement. If you find one of these awkward, it's okay to only do the other.*



Good starting point    Too much tension



Good finish    Too much tension

#### **A) Floating Your Head (up the wall):** 3-5

repetitions, once or twice a day, or as often as feels beneficial.

*NOTE: This version is very awkward with strong hyperkyphosis (more than 3-4 fingers of space between head and wall). Do the reclining version C) described below instead, or version D) if you can't get down to the floor.*

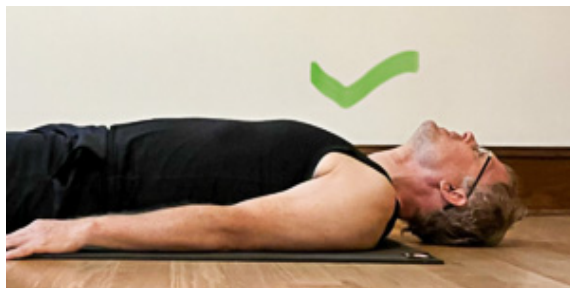
Stand with your back against a wall. Hyperextend the neck intentionally but gently (1<sup>st</sup> photo), pressing your head against the wall to lift your shoulder blades off the wall, while your buttocks stay in contact with the wall. Don't overdo this action as it really doesn't feel good (2<sup>nd</sup> photo shows incorrect action with excessive neck tension). On an inhale, imagine lengthening through the back corner of the crown of your head, allowing the back of your head to float up the wall while allowing your shoulder blades to slide down your back (3<sup>rd</sup> photo). Emphasize relaxation over muscle contraction. Make sure that your head stays in contact with the wall. Notice how good this movement feels.

If you engage the muscles of the throat to try and lengthen the back of the neck, or if you are trying to force the movement, or simply move too far, you end up in a position that does not feel spacious. (4<sup>th</sup> photo shows incorrect action).

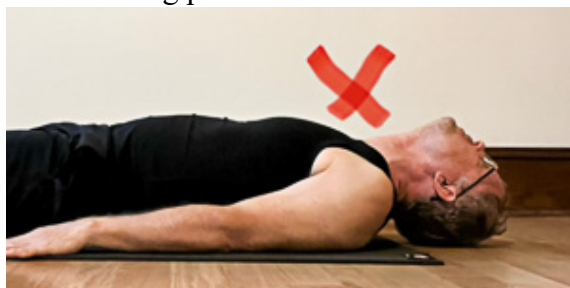
**Forcing the movement or trying to go as far as possible is counterproductive.**

The correct movement teaches the engagement of the deep neck flexors and lower trapezius, which is an essential skill for reversing head forward position, and for learning to disrupt the stress response. Repeat the "Wall Test" above to see if the distance between your head and the wall has decreased in standing pose.

If this proves challenging, you can practice this first lying on your back, with your head NOT on a yoga mat so it can slide freely. Lying on the floor will not allow you to engage your back muscles effectively, but may make it easier to find the deep neck flexors. If you can allow the head to float away from the shoulder blades without any perceivable effort, then you are using the right muscles, because most of us cannot feel our deep neck flexors contract.



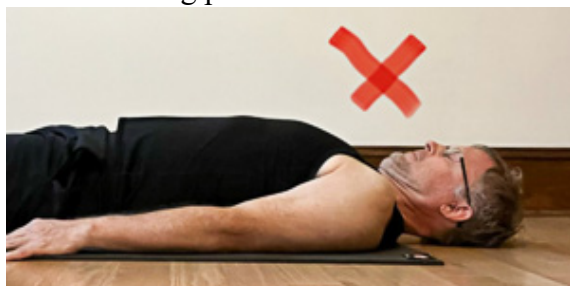
Good starting point



Too much neck tension



Good finishing position



Too much throat tension

**B) Floating Your Head (along the floor):** 3-5 repetitions, once or twice a day, or as often as feels beneficial.

Lie on the floor, with your head NOT on a sticky mat. The floor must be smooth so that your head can slide effortlessly.

On an exhale, gently pull the back of the head towards the shoulder blades by contracting your neck extensors (1<sup>st</sup> photo). Don't pull the head in as far as possible, just far enough to feel the neck tension (see 2<sup>nd</sup> photo for incorrect action).

Tilting the head back is our common tendency, which we want to learn to undo. However, in order to learn how to lengthen the back of the neck, we have to shorten it first.

Observe how tilting the head back triggers your stress response and dumps adrenaline into your bloodstream. Hold this position for a couple of breaths to fatigue the neck extensors, which helps facilitate the next, desired action.

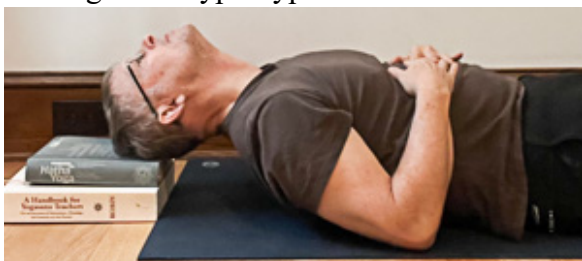
On an inhale, allow the back of your head to gently and effortlessly slide away from the shoulder blades (see 3<sup>rd</sup> photo). Don't try to move as far as possible, because you will just end up using the wrong muscles (see 4<sup>th</sup> photo for incorrect action). The right muscles to use are your deep neck flexors, which most of us cannot feel. Thus if the movement feels truly effortless, you have figured out how to use the right muscles. If you feel like your throat is constricting, you are using the wrong muscles. If you have a soft hollow space for 3 fingers along the back of your neck when you finish the movement, you are good. If the back of your neck has hardened, you either went too far, or used the wrong muscles. Your throat muscles do not reciprocally inhibit your neck extensors. Only the deep neck flexors and the middle back muscles can do that.



Stack of books is the correct height for this level of hyperkyphosis.



Head is falling back. Support is too low for this degree of hyperkyphosis.



Good starting position



Good finishing position



Check whether you have space in the back of the neck for 3 fingers.

### C) For **STRONG** hyperkyphosis: **Floating Your Head (on a stack of books):** 3-5

repetitions, once or twice a day, or as often as feels beneficial.

Lie on the floor, with your head on a book or stack of books that allows your head to feel like it is NOT falling backwards (compare 1<sup>st</sup> and 2<sup>nd</sup> photos). Leave some space between the tops of your shoulders and the stack of books. You want your head supported, but not your neck. The stronger your hyperkyphosis, the taller the stack has to be (for now). But it is important that you use the shortest stack that allows your head to feel neutral. Over time you can shorten the stack more as your posture improves. Eventually do this on the floor (see “B. Floating your head along the floor”, below).

Make sure the book on top has a smooth cover. You can also use a yoga block, but they are designed to be non-slippery, so it will be harder to get the head to slide. This is not helpful, as we want to emphasize a sense of ease in this exercise. On an exhale, gently pull the back of the head towards the shoulder blades by contracting your neck extensors (3<sup>rd</sup> photo). Don’t pull the head in as far as possible, just far enough to feel the neck tension. Tilting the head back is our common tendency, which we want to learn to undo. However, in order to learn how to lengthen the back of the neck, we have to shorten it first. Observe how tilting the head back triggers your stress response and dumps adrenaline into your bloodstream. Hold this position for a couple of breaths to fatigue the neck extensors, which helps facilitate the next, desired action.

On an inhale, allow the back of your head to gently and effortlessly slide away from the shoulder blades (see 4<sup>th</sup> photo). Don’t try to move as far as possible, because you will just end up using the wrong muscles. The right muscles to use are your deep neck flexors, which most of us cannot feel. Thus if the movement feels truly effortless, you have figured out how to use the right muscles. If you feel like your throat is constricting, you are using the wrong muscles. If you have a soft hollow space for 3 fingers along the back of your neck when you finish the movement, you are good (5<sup>th</sup> photo). If the back of your neck has hardened, you either went too far, or used the wrong muscles, or both.



Good starting point    Too much tension



Good finish    Too much tension



Check for 3 finger space

**D) For STRONG hyperkyphosis if you can't get down to the floor: Floating Your Head Up Without a Support:** 3-5 repetitions, once or twice a day, or as often as feels beneficial.

Stand or sit. If you are sitting, move your sit bones all the way back on the chair. On an exhale, gently tilt your head back and down towards the shoulder blades by contracting your neck extensors (1<sup>st</sup> photo). Don't tilt the head back as far as possible (2<sup>nd</sup> photo), just far enough to feel the neck tension. Tilting the head back is our common tendency, which we want to learn to undo. However, in order to learn how to lengthen the back of the neck, we have to shorten it first.

Observe how tilting the head back triggers your stress response and dumps adrenaline into your bloodstream. Hold this position for a couple of breaths to fatigue the neck extensors, which helps facilitate the next, desired action.

On an inhale, allow the back of your head to gently and effortlessly float up and away from the shoulder blades (3<sup>rd</sup> photo). As the back of the head floats up, let the breast bone float up as well, as the shoulder blades roll down your back (note the 3 arrows in the 3<sup>rd</sup> photo). Don't try to move as far as possible, because you will just end up using the wrong muscles. The right muscles to use are your deep neck flexors, which most of us cannot feel. Thus if the movement feels truly effortless, you have figured out how to use the right muscles. If you feel like your throat is constricting, you are using the wrong muscles (4<sup>th</sup> photo). If you have a soft hollow space for 3 fingers along the back of your neck when you finish the movement, you are doing the movement correctly (5<sup>th</sup> photo). If the back of your neck is hard, you either went too far, or you used the wrong muscles, or both.

**OPTIONAL: Other postural misalignments**

*NOTE: These may not apply to you. If they don't, you can completely ignore this section. However, if you have one of these misalignments, addressing it will also probably help you improve your hyperkyphosis, as well as your overall wellbeing.*



Mild Hyperkyphosis      Moderate Hyperkyphosis



Swayback      Hyperlordosis

**Wall Test:** Stand 1 inch (2-3 cm) in front of a wall without touching it. If you have a ponytail, take it out. Stand in a way that feels neutral. Shuffle your feet backwards in tiny steps until some body part touches the wall. Note which body part touches the wall first.

*NOTE: If you have big glutes, use the corner of a post or corner of a doorway to measure your alignment. Technically you want to measure your head relative to your sacrum, not your buttocks.*

**Neutral Posture:**

If you have neutral posture your buttocks (actually the sacrum), upper back, and head touch the wall at the same time, with calves and heels *not* touching the wall. Depending on the shape of your head, your head may not quite touch the wall, but there will be less than one finger width of space between your head and the wall. This postural alignment is exceptionally rare but very beneficial.

*NOTE: I don't currently have neutral posture, either (1<sup>st</sup> photo is my actual posture these days).*

**Common Postural Misalignments:**

1. Your buttocks and upper back are touching the wall, but your head is not touching the wall: **Hyperkyphosis/Head Forward Position** (1<sup>st</sup> photo shows mild hyperkyphosis, 2<sup>nd</sup> photo moderate).
2. Your upper back touches the wall before your buttocks: **Swayback Posture** (3<sup>rd</sup> photo shows swayback; if your calves or heels also touch the wall before your buttocks, your swayback is more advanced).
3. Your buttocks touch the wall before your upper back, AND when you bring your upper back to the wall, you can slide your hand and forearm

between your lower back and the wall without it getting stuck:

**Hyperlordosis** (4<sup>th</sup> photo).

*NOTE: If you have hyperlordosis but never experience lower back pain, this postural misalignment is the least important of the 3 to address. However, if your lower back hurts when you lie on your back with your legs flat on the floor, then your hyperlordosis is worth addressing.*

If you need extra motivation to work on your posture, and appealing to your vanity helps, notice that my stomach looks flattest with the most neutral posture. It's not that I am sucking in my stomach in the first photo. It's just that all 3 postural misalignments push it out, each in a slightly different way.



### Reducing Swayback Posture

Swayback Posture is usually easier to correct than hyperkyphosis/head forward position, but it also tends to contribute to hyperkyphosis. Swayback posture can usually be reduced through a mindful application of anterior and posterior hip tilt.



If your shoulders, calves, or heels touch the wall before your buttocks, you have swayback posture. If your heels or calves touch at the same time as your buttocks, you may have it, but that combination warrants a closer look. Essentially, if you were to draw a line to describe the shape your body is making and that line is a C-curve with the hips farther forward and the feet and shoulders farther back, that's swayback posture (see first photo).

To come out of swayback posture, use anterior hip tilt to guide your hips and buttocks backwards. You know this is working if the groins (under your fingertips in the photos) hollow out and get soft.

Then, as this movement tends to overarch the lower back, gently release the tailbone down towards the floor by gently toning your lower belly up and in (posterior hip tilt), *without pushing the hips forward again* (the groins stay hollow and soft). Check your posture again by walking backwards to the wall. You want your

buttocks touching at the same time as your shoulders (or even slightly before), and you don't want your calves and heels touching the wall.

*NOTE: if you have a thick baseboard and your heels are touching it, that's okay.*



### **1. Stretch out what has gotten tight** (the hamstrings and glutes): Supta

Padangusthasana I and III, minimum 5-10 breaths each variation each side, up to several minutes: Keep both legs straight by flexing the toes towards the knees.

Can also be done in a doorway, using the wall to support the raised leg instead of having to use a strap. This is particularly advantageous for very tight hips, as it allows even more emphasis on surrender. For variation I, if you get a juicy stretch with a straight leg long before the leg is vertical, then bending the knee to bring the leg vertical is perfectly fine, so your arm doesn't have to fight gravity. But make sure you don't bend the knee so much that you lose the stretch. As your range of motion increases, straighten the leg gradually to maintain an appropriate stretch intensity. Move your thigh past vertical only when your leg is completely straight, to prevent upper hamstring tendon tears ("yoga butt"). For variation III, switch hands on the strap and bring the leg across the body while keeping both shoulders on the floor



### **2. Strengthen what has gotten weak** (the hip flexors): Single Leg Lifts:

Lie on your back. Bend one knee to stabilize the lower back against the floor. Engage your lower abs to stabilize your lower back further, then lift the other leg just barely off the floor as you inhale, and release it back down as you exhale, 5-10 times. Keep the leg straight by flexing the toes towards the knee and engaging your quads.

Alternatively lift the leg and hold it as long as you can before exhaling it back down. 1-3 times. Only lift the heel a few inches off the floor.



### Double Leg Lifts:

*NOTE: This is quite a challenging exercise, and potentially problematic for your lower back. Do not attempt this exercise if you have or easily get lower back pain.*

Lie on your back. Draw your lower abs in towards the spine and up towards the ribcage to stabilize your lower back into the floor. Or, even better, place your hands palms down under your lower back and engage your abs to stabilize your lower back into your hands. Then lift your legs just barely off the floor as you inhale, and release them back down as you exhale, 5-10 times. If this is uncomfortable for your lower back, do single leg lifts (see above).



**Plank:** Straight line from shoulders through hips to heels. Exhale push heels back to transfer more weight to the feet. If pose requires too much effort, do it with knees on the floor, creating a straight line from the knees through the hips to the shoulders.

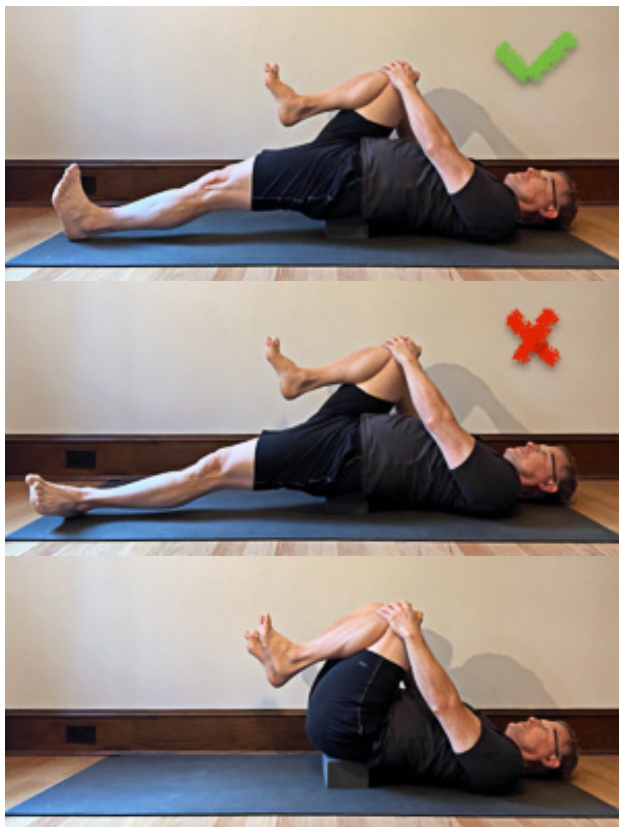
## Reducing Hyperlordosis

Hyperlordosis is not as detrimental, unless it contributes to lower back pain. If you get lower back discomfort when lying on your back with your legs straight, then you probably have hyperlordosis caused by over-contracted psoas muscles. The key is to teach your brain to stop over-contracting the psoas.



**1. Relax what is over-contracted:** If you get lower back discomfort in Savasana when your legs are extended along the floor, you can *avoid* that problem by bending your knees and placing a bolster or yoga blocks under your bent legs. However, you can also *solve* the underlying problem, which is a chronically overcontracted Psoas, by doing this gentle psoas stretch.

**Reclining Psoas Stretch on Block:** 30 seconds each side. Lie on your back, bend your knees, press your feet into the floor and slide a thick (4", 10cm) yoga block on its lowest setting under your sacrum (1<sup>st</sup> photo). Bring one knee towards your chest and hold the shin with your hands (2<sup>nd</sup> photo). Only then extend the other leg and rest the heel on the floor. Keep the extended leg rotating slightly inward so that the kneecap and toes point straight up instead of out. If you let the straight leg rotate externally, you will lose the stretch

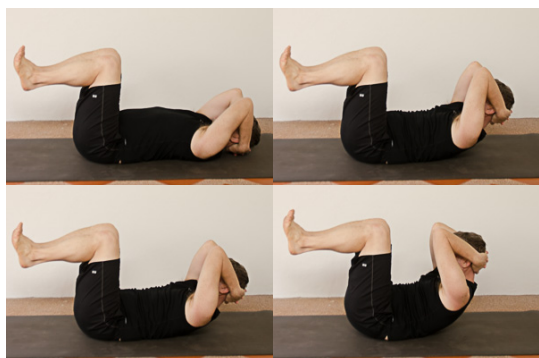


(compare the photo with the green check mark with the photo with the red 'x').

Stay here for 30-60 seconds, then switch sides. Transition to the other side by bending the extended leg first, not by straightening the bent leg first (5<sup>th</sup> photo).

If you don't feel a stretch, don't worry. Most people cannot feel their Psoas being stretched. You will know that this stretch is effective if the lower back pain is reduced once you are back in a standard, straight-leg Savasana. If the pain is reduced but not completely gone, you can still bend your knees to avoid the discomfort. However, if you do this regularly for a few weeks, you may find that you can lie on your back pain free even with extended legs. If the pain ever comes back, you can resume doing this stretch before Savasana.

*NOTE: This stretch will only be effective if you have a sufficiently tall support under your sacrum, about 4" or 10 cm. This will not work if you are lying flat on the floor!*



**2. Strengthen what has gotten weak (the abs):** Crunches 3-10 repetitions: Interlace fingers behind head, inner forearms touching sides of head throughout the entire exercise. Inhale head and shoulders off the floor. Exhale draw lower belly towards floor before moving elbows slowly towards knees. Do NOT move knees towards the elbows. Touching elbows to knees is NOT the point. Inhale return to starting position. If it does not create too much effort, keep head and shoulder blades off the floor throughout.

### Some more things to consider as you practice

"The highest form of human intelligence is to observe yourself without judgment."  
—Jiddu Krishnamurti

"Enlightenment is ego's greatest disappointment."  
— Chögyam Trungpa

"Pain is guaranteed. Suffering is entirely optional, and always self-imposed."  
—Siddhartha Gautama

"Life is a good news/bad news joke: The good news is that through pain and suffering you gain wisdom. The bad news is that there is more good news coming."  
—Paul Linden

“It’s not what’s happening that matters, it’s our relationship to what’s happening that matters.”

—Joseph Goldstein

“Moving in the right direction is important, making it perfect is not. Focusing on perfection takes you out of this moment and thus disrupts mindfulness. Focusing on what you can do right now anchors you more firmly in the here and now and thus supports mindfulness.”

“Each thing that pisses you off, each experience that disturbs your equanimity, is just another opportunity to practice responding mindfully, instead of reacting mindlessly.”

“Learn to listen to your body more, and your ego less.”

“Don’t get attached to the outcome of your practice. Goals are not a problem, but the attachment to your goals is.”

“Leading with your fingers, with your chin, with your gaze, is a sign that you are too concerned about external goals in your practice, and are not yet tuning in to your breath and your core.”